

MCDR INSPECTION REPORT

S.N.	Particulars	Details
1	File No.	CHG/BBR/LST-01/NGP/662
2	Name of the Mine	Risda-Kukurdi Limestone Mine
3	Date of Inspection	23.09.2021
4	Name of Inspecting Officer	D. Dash, Senior Mining Geologist
5	Last date of Inspection & Officer	24.11.2020, Shri Rajesh Kumar Das , Sr. ACOM
6	Total Lease Area (Ha) with breakup of Non-forest and forest land	395.05 ha, Non forest
7	Mine code	38CHG19001
8	IBM Registration Number under rule 45 of MCDR,2017	IBM/16679/2013
9	Name of the Lease, Address, Phone, email and fax number	M/s Nu Vista Limited
10	Village	Risda
11	Taluka/Mandal	Baloda Bazar
12	District	Balodabazar-Bhatapara
13	Pin code	493332
14	State	Chhattisgarh
15	Post Office	Risda
16	Nearest Police Station	Baloda Bazar
17	Nearest Railway Station	Bhatapara
18	Date of Grant of Mining Lease	6/12/1996 to 05/12/2016 (20 years) Granted to Shri Anil Pusadkar, Later on, Mining lease was transferred to Shri Khemlal Verma vide lease deed dated 24/05/2004 and registered on 07/06/2004. Mining lease extended upto 05/12/2046 (30 years)
19	Date of Execution	12.11.2007
20	Date of opening of Mine	08.09.2009
21	Date of First Renewal, if applicable and its period & expiry	07.08.2013
22	Date of Second Renewal, if applicable and its period & expiry	N.A.
23	Date of submission of renewal application if Mining Operations are continuing under deemed extension	N.A.
24	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Jayakumar Krishnaswamy, MD, Address- Equinox Business Park, Tower 3, East Wing, 4th floor, LBS Marg, Kurla West, Mumbai, Mumbai City, Maharashtra-400070, E-mail- jayakumar.krishnaswamy@nuvoco.com Date of appointment 02.12.2020
25	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Anant Kumar Mahobe, CMO, Address- NU Vista Limited, Village: Risda, Suhela Road, District: Baloda Bazar- Bhatapara (Chhattisgarh), E-mail: anant.mahobe@nuvoco.com Date of appointment- 09.04.2019
26	Name of the Mine Manager with Address, phone, email, fax number and date of appointment in mines	Ajay Khare, Address- NU Vista Limited, Village: Risda, Suhela Road, District: Baloda Bazar- Bhatapara (Chhattisgarh), E-mail: ajay.khare@nuvoco.com Phone No. 7247725868

		Date of appointment-15.05.2020
27	Name of the Mining Engineer, Qualification and total experience with address, phone, email, fax number and date of appointment in the mine	Jaiprakash Dwevedi, Address- NU Vista Limited, Village: Risda, Suhela Road, District: Baloda Bazar- Bhatapara (Chhattisgarh). E-mail: Jaiprakash.dwevedi@nuvoco.com, Phone No. 7583807064, Date of appointment 25.05.2017
28	Whether Geologist and Mining Engineer appointment in mines satisfy the rule 55 & carrying out their duties as per rule 54 & 55 (MCDR 2017).	Manoj Rajnarayan Kushwaha Address- NU Vista Limited, Village: Risda, Suhela Road, District: Baloda Bazar- Bhatapara (Chhattisgarh)., E-mail: manoj.kushwaha@nuvoco.com Phone no. 7247716565, Date of appointment 20.08.2018.
29	Date of Approval of Mine Plan/Modified Mine Plan with five- year period and specific condition in approval letter, if any.	10.01.2020
30	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Limestone (Cement)
31	Mineral(s) granted in lease and approved for Mining	Opencast
32	Method of Mining (Opencast, Underground)	Fully Mechanized
33	Category (Fully Mechanized, Others or Manual)	Captive
34	Captive/Non-Captive	Dated 6.04.2018 for 5.5 MTPA
35	Environmental Clearance	10.01.2020

EXPLORATION

Sr. No.	Item	Proposals (2020-21)	Actual work	Remarks
1a	Backlog of previous year	7	2	5 holes were pending due to pandemic covid -19 . However, proposed 05 boreholes were reported drilled on day of inspection. Therefore, violation of 11(1) of MCDR, 2017 is not pointed out.
1b	Exploration over lease area for Geological axis 1 or 2.	384.30ha + 5.35ha	384.30ha + 2.25ha	5 holes were pending due to pandemic covid -19 and drilled during the current year.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Gem Consultant Drilling 5.50lakh	1.06 lakh	
1d	Balance area to be explored to bring Geological axis in 1 or 2	-	-	-
1e	Balance reserves as on 31.03.2021	UNFC Code 111&121,122 : 239.09 million Tons	Reserve as on 31.03.2021 - 217.782 million tonnes	UNFC code 211- 68.157 million tonnes 221 & 222- 6.858 million tonnes 333- 44.612 million tonnes

1f	General remarks of inspecting officer on geology, exploration etc.	The area is part of Chhattisgarh basin and comprises of Limestone, Dolomite and Shale. The strike trend is NE-SW directions. The deposit is in bedded form. Limestone occurs below 1 to 3m top soil layer. In top bench, Limestone occur with intercalated waste. The deposit is largely fractured with cracks and fissures for which after blasting there is a lot of boulder generation. Quality of Limestone is consistent after 1st bench. The backlog of exploration has been completed during the current year and area is now fully explored.
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DEVELOPMENT

S.N.	Item	Proposals (2020-21)	Actual work (2020-21)	Remarks
2a	Location of development w.r.t. lease area	three pits proposed, North pit, South Pits- 2 nos on south western part of lease.	As per proposal.	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	One bench in top Soil 1-3 mtrs, OB- 3.5 mtrs 03 Limestone benches- 10 mtrs	One bench in top Soil 1-3 mtrs, OB- 3.5 mtrs 03 Limestone benches-10 mtrs	Development as proposed.
2c	Stripping ratio or ore to OB ratio	1 : 0.07	1:0.16	
2d	Quantity of topsoil generation in m ³	296,550m ³	151,975m ³	
2e	Quantity of overburden generation in m ³	544,950m ³	629,399m ³	395.05-13.5
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Development is as per proposals in approved document. However, enhanced waste handling is due to intercalated waste encountered in mineralized zone.		

EXPLOITATION

Sr. No.	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	3 Nos	3 Nos	As per proposal
3b	Quantity of ROM mineral production proposed	8.249 million tonnes	4.789million tonnes	EC clearance is only for 5.5 Million Tons.
3c	Recovery of salable/usable mineral from ROM production	90%	94.65%	Recovery% cited is as reported by the party. However, the actual recovery may on the lower side considering higher than anticipated intercalated waste generation in mineralized zone.
3d	Quantity of mineral reject generation	Screen reject_824984 tons	Screen reject_26237tons	
3e	Grade of mineral reject generation and threshold value declared	Threshold value CaO >34%	Mineral reject CaO 25 to 30 %	Based on grade of Limestone cited, the mineral rejects can be considered as waste since they are below threshold limit.

3f	Quantity of sub-grade mineral generation	Nil	Nil	
3g	Grade of sub-grade mineral generation	Nil	Nil	
3h	Manual / Mechanized method adopted for segregating from ROM	Mechanized	Mechanized	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No proposal	Not done.	
3j	Provision of drilling & blasting in mineral benches	Yes	Yes	
3k	Provision of mining machineries in mineral benches	Yes	Yes	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	1-5m & 10m	1-5m & 10m	
3m	Total area covered under excavation/pits	84.30ha	74.500ha	
3n	Ore to OB ratio for the pit/mine during the year	1: 0.11	1:0.17	
3o	Total area put in use under different heads at the end of year	i) Total Exploitation area- 84.30ha ii) Road, plant ,buildings, water storage tank - 15.35ha iii) Dump area (waste+ screen) =11.5ha	i) Total exploitation area -74.500 ha ii) Road, plant ,buildings -5.720ha iii) Dump area (waste screen) =6.13 ha	Land degradation is as per proposals in approved document.
3p	Production of ROM mineral during last five-year period, as applicable	Last Five year proposal 2014-15_0.5 MT 2015-16_0.5 MT 2016-17_3.17 Million tons 2017-18_5.5 Million tons 2018-19_5.5 Million Tonnes 2019-2020_6.5 million tonnes 2020-2021_9.0 million tonnes Total Proposed Production- 30.67 Million Tons	Last Five year 2014-15_0.0 MT 2015-16_0.0 MT 2016-17_0.99 Million tons 2017-18_3.374 Million tons 2018-19_5.194 Million tonnes 2019-2020_4.842million tonnes 2020-2021_4.627 million tonnes Total actual production- 18.974 Million Tons	Mine is yet to be operated full capacity due to lack of statutory clearances.
3q	General remarks of inspecting officer on method of mining etc.	Pit development is as per proposal. The development of quarry is restricted and compartmental due to statutory restriction imposed due to presence of number of seasonal nalas and high tension electric line. The lessee has applied for diversion of electric lines. After, diversion of electric line, part of the resources blocked can be worked out.		

SOLID WASTE MANAGEMENT-DUMPING

S.N.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Yes	Yes	

4b	Location of topsoil, OB & mineral reject dumps	Topsoil Dump E615990-616184 N2393620-2393481 Location of OB-1 E614580-614466 N2393114-2392935 OB Dump-2 E615948-615298 N2393917-2393137 mineral Reject- E614334-614533 N2393235-2393120	Topsoil Dump E615883-616195 N2393472-2393472 OB Dump-1 E 614364-614578 N2392936.0- 2393115.0 OB Dump-2 E616084-616213 N2393843-2393731 mineral reject E614341-614517 N2393124-2393229	As per proposal.
4c	Number of dumps within lease area and outside lease area	4 no's	4 no's	Within the lease
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	SW & E of Lease area	SW & E of Lease area.	Temporary dump is proposed.
4e	Number of active & alive dumps	3	3	
4f	Number of dead dumps	1	1	
4g	Number of dumps stabilized	1	1	
4h	Whether Retaining wall or garland drain all along dumps are there	yes	yes	Toe-bund and garland drain made along the dump
4i	Length of Toe-bund or garland drain all along dump	Toe-bund 760m Garland 788m	Toe-bund 765m Garland 789m	along the dump area
4j	Number of settling ponds	No proposal	Nil	
4k	Specific comments of inspecting officer on waste dump management	Waste management is as per proposal.		

SOLID WASTE MANAGEMENT-BACKFILLING-N.A.

S.N.	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting	Nil	Nil.	No part of lease area is matured for backfilling.
5b	Area under backfilling of mined out area	Nil	Nil.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Nil	Nil.	
5d	Total area fully reclaimed & rehabilitated	Nil	Nil.	
5e	General remarks of inspecting officer on backfilling, reclamation etc	Nil	Nil.	

PROGRESSIVE MINE CLOSURE PLAN

S.N.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E (2). Details should be given in the format as given in Annexure-20.	yes	Submitted PMCP report 2020-2021 on dated 18.06.2021.	

6b	Management of worked/mined out benches i) Area available for rehabilitation (ha) ii) Afforestation done (ha) iii) No. of saplings planted during the year iv) Cumulative no. of plants v) Any other specific method of 2019-20 rehabilitation vi) Cost incurred on watch & care during the year	i. Not applicable ii. 3.57 ha iii. 3967 iv. 65748 v. Not applicable vi. INR 535,545.00	i. Not applicable ii. 3.80ha iii. 9850 iv. 69205 v. Not applicable vi. INR 1,329,750.00	
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L * B * D) ii) Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	Not proposed	Nil	No area is matured for backfilling.
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	Not proposed	Nil	
6e	Compliance of Environmental monitoring (core zone & buffer zone)		Environment parameters monitored regularly.	
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	Progressive Mine Closure plan implementation is as per proposal.		

MINERAL CONSERVATION

S.N.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM Minerals are to be dispatched to crusher for sizing and feeding to captive cement plant.	ROM Mineral dispatch as proposal.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanized	Mechanized	
7c	Different grade of mineral sorted out at mines	N.A.	N.A.	
7d	Any beneficiation process at mines	Only Screening	As proposed.	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Run of mine ore are fed to crusher for sizing and after which it is fed to captive cement plant.		

ENVIRONMENT

S.N.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes	Separate stacking & Plantation.	Top soil is separately stacked and used for plantation.
8b	Concurrent use or storage of topsoil	Top soil is to be used for Plantation	Used for plantation as per proposal.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Yes	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc.)	Not proposed	Nil	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)			
8g	Survival rate	70%	70%	
8h	Water sprinkling on roads to control airborne dust	By water tanker	By water tanker	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Separate stacking of top soil is done which is being used for plantation purpose.		

COMPLIANCE OF RULE 45

S.N.	Item	COMMENTS	Remarks
9a	Status of submission of Monthly and Annual returns	Annual Return for 2020-21 submitted. Monthly return submitted till August 2021.	Returns have been submitted within the stipulated time.
S.N.	Item	Details GIVEN in A.R. 2020-21	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Jaiprakash Dwiedi, Mining Engineer Manoj Kushwaha, Mining Geologist) Ajay Khare , Mine Manager	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	i)Total exploitation area -74.500 ha ii)Road, plant ,buildings -5.720ha iii) Dump area (waste screen) =6.13ha	Figures appear to be correct as per field position.
9d	Scrutiny of Annual return on afforestation	9850 saplings in 70 ha area within lease area and 12000 saplings outside lease area in 70 ha area.	Extensive plantation work have been done.

9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	26237 tonnes of Cao- 25-30% considered as mineral rejects	The material can be considered as waste since below threshold limit.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Opening stock: Nil Closing stock: Nil Production: 4789748 tonnes	Figures cited appear to be correct. No stock of mineral observed in field.
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex Mine Price: Rs 214.56	Figure cited appear to be correct.
9i	Scrutiny of Annual return on fixed assets	Rs 2365 crores	
9k	Scrutiny of Annual return on mining machineries	DOZER 320.000 HP : 2 nos Non Electrical DUMPER 55.000 TONNE : 6 nos Non Electrical DUMPER 60.000 TONNE : 2 nos Non Electrical SHOVEL (HYDRAULIC) 6.500 CUM : 3 nos Non Electrical EXPLOSIVE VAN 10.000 TONNE : 1 nos Non Electrical ROCK DRILL (NONELEC.) 115.000 MM : 2 nos Non Electrical SHOVEL (HYDRAULIC) 1.700 CUM : 2 nos	In the mines, a lot of boulder generation was observed, for which a rock breaker is required in the mine.

Details of violations observed during current inspection and compliance position of earlier violation pointed out:-

During the current inspection, no serious violation is observed. Violation of Rule 11(1) of MCDR , 2017 due to non-compliance of exploration proposal during the year 2020-21 was observed. However, the backlog of exploration has been carried out during the current year. So no violation is pointed out. During the previous inspection, no violation was pointed out.

Star rating self appraisal template has been validated.

(D.Dash)
Senior Mining Geologist